TOSHIBA
Storage Device Division

CD-RW/DVD-ROM DRIVE

SD-R1102
Installation Instructions

with VOB InstantCD/DVD
and
CyberLink PowerDVD™ Software

VERSION 1.0
APRIL 2001

CD-RW/DVD-ROM DRIVE
Instruction Instructions

For the following Drive:

SD-R1102

TOSHIBA AMERICA ELECTRONIC COMPONENTS, INC.
STORAGE DEVICE DIVISION
35 Hammond
Irvine, CA 92618

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You have just purchased one of the most advanced storage technologies available. As with any new technology, you must read, and follow all set-up and usage instructions in the applicable user guides and/or manuals enclosed.

WARNINGS

Operating this optical disk drive (the "Equipment") outside its rated capacities and specifications may cause electrical overload, excessive heat, malfunction, erroneous operation, and/or performance degradation. Please handle the Equipment properly in compliance with the warnings provided below.

IF YOU DO NOT COMPLY WITH THESE WARNINGS AND NOTICES, TOSHIBA CANNOT GUARANTEE THE SAFETY, RELIABILITY, AND PERFORMANCE OF THE EQUIPMENT AS IS EXPRESSLY PROVIDED IN THE EQUIPMENT'S SPECIFICATIONS.

Manufacturers and resellers of computer systems (each, a "System") using this Equipment and/or this Equipment itself should notify the end-users of the warnings provided herein and ensure that they comply with these warnings.

1. This Equipment does not involve any over-current protection circuit. You should use an appropriate over-current protection circuit in any System to which this Equipment is connected. TOSHIBA SHALL NOT BE LIABLE FOR ANY DAMAGES TO THE SYSTEM WHICH DOES NOT HAVE ANY OVER-CURRENT PROTECTION.

2. **DO NOT** disassemble or modify this Equipment. Toshiba makes no guarantee as to the reliability, safety and performance of this Equipment when unauthorized disassembly and/or modification have occurred, whether or not such guarantees are set forth in the specifications. **TOSHIBA WILL NOT BE LIABLE FOR ANY DAMAGES RESULTING FROM SUCH UNAUTHORIZED DISASSEMBLY OR MODIFICATION.**

3. Read carefully and comply with this Product Specification to avoid the risk of data error in the Equipment's writing operation. Data error would be made by factors other than this Equipment; for example, poor storage media, misuse of the Equipment, malfunction in a System. Check whether the original data is correctly copied or stored upon completion of writing operation. **TOSHIBA SHALL NOT BE LIABLE FOR ANY DAMAGES RESULTING FROM SUCH DATA LOSS.**

4. Make sure you take all necessary steps to protect your data, such as system backup and/or mirroring disk subsystems. Taking these actions will help avoid the risk of unexpected data loss or data corruption.

5. Manufacturers and resellers of Systems using this Equipment should consider the System's safety and its data integrity, in order to avoid the risk of damage caused by data loss or data corruption, as well as problems or accidents caused by the System's malfunction.

6. **DO NOT** use this Equipment in any system, such as medical equipment, where personal injury or property damages could result from the Equipment's malfunction, unexpected data corruption, or data error in the reading operation.

7. When a disc cannot be ejected for some reason, you can use the 'emergency eject' mechanism. To avoid risk of damages to the disc, turn the power off and wait at least one (1) minute before you eject the disc using the emergency eject mechanism.

NOTICE

To avoid the risk of damage to the Equipment:

1. Always turn off the System power before mounting or removing the Equipment.

2. Always be sure to insert the DC power plug in correct direction.

3. Handle the Equipment only in electrostatically safe environment and **do not** touch connecting terminals with bare hands when you attach or detach the Equipment from other products.

4. **DO NOT** do any of the following. Taking any of the following actions will damage or destroy the Equipment or the disc, and could cause data loss or corruption:

   4.1 **DO NOT** use storage media (CD's / DVD's) that are not the correct size or shape, or which **do not** meet the minimum formatting requirements set forth in section 3.1.(1) of this Product Specification.

   4.2 **DO NOT** insert more than one (1) CD or DVD disc into the drive at any time.

   4.3 **DO NOT** load or eject any CD or DVD disc with force.

   4.4 **DO NOT** eject a CD or DVD disc while the drive is in operation.

   4.5 **DO NOT** insert anything else into the drive other than a CD or DVD disc.

5. Before you carry or move the Equipment, always ensure that the disc tray is in the "closed" position to avoid the risk of damages to the Equipment. If the tray is open, turn on the Equipment and push the eject button to close the disc tray. Note that the internal workings of the Equipment are not completely stabilized for moving if you close the disc tray while power is not on.

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CAUTION!

- **REFLECTIVE OBJECTS SHOULD NOT BE PLACED IN THE DISK SLOT DUE TO POSSIBLE HAZARDOUS RADIATION EXPOSURE.**
- **USE OF CONTROLS, ADJUSTMENTS, OR PROCEDURES OTHER THAN SPECIFIED IN THIS MANUAL MAY RESULT IN HAZARDOUS RADIATION EXPOSURE.**

Version	*Date Published*	*Revised Contents*
01	April 2001	Initial release

Congratulations on your purchase of a Toshiba CD-RW/DVD-ROM drive and Kit. The following information will help you in the simple installation of your new CD-RW/DVD-ROM drive.

CHECKING YOUR KIT PACKAGING

Please unpack your CD-RW/DVD-ROM kit, and assure that you have the following items:

- Toshiba CD-RW/DVD-ROM Drive
- CD-R Blank Media CD
- CD-RW Blank Media CD
- CyberLink PowerDVD™ Software
- VOB InstantCD/DVD Software CD
- CD-RW/DVD-ROM Installation Instructions (this manual)
- Quick Start Guide
- Mounting screws (4)
- IDE BUS cable
- DVD/CD sound cable

Additional items you may need that are not included in the kit are:

- Phillips Screwdriver
- Mounting hardware (i.e. some computer systems use mounting rails).

SYSTEM REQUIREMENTS

The CD-RW/DVD-ROM kit requires the following:

- ✔ At least 55MB of free hard disk space
- ✔ At least 32MB of RAM
- ✔ *Pentium II processor at 266MHz or higher or....
  *Celeron 300A processor or higher or....
  *K6-2 processor at 300MHz or higher
- ✔ Display card supporting DirectDraw
- ✔ 16-bit or better sound card
- ✔ Microsoft™ Windows 95 or higher
- ✔ Amplified stereo speakers

* These requirements are only required if you are using the CyberLink PowerDVD™ software for movie playback. Toshiba's CD-RW/DVD-ROM drive will work as a CD-ROM, DVD-ROM and CD-RW when using a lower speed Pentium system.

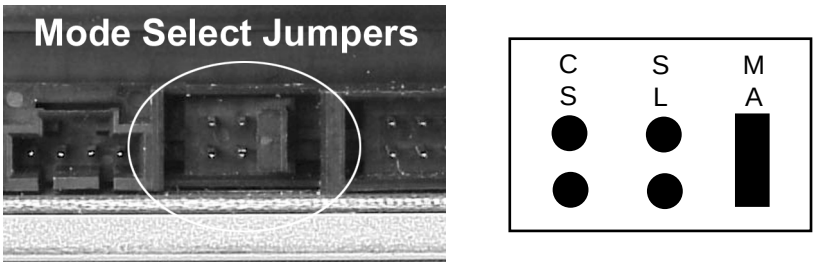
The following steps must be performed to properly install your CD-RW/DVD-ROM.

- Set drive's jumpers
- Connect audio cable
- Attach IDE BUS cable
- Connect power cable
- Mount CD-RW/DVD-ROM
- Install CyberLink PowerDVD™ software (used for viewing DVD movies)
- Install VOB InstantCD/DVD software (used for recording CDs)

SETTING JUMPERS

The mode select jumpers are six (6) straight angle pins located on the rear of the CD-RW/DVD-ROM. By placing a jumper on the pins, you can select the following functions:

CS: – Drive is configured using host interface signal CSEL
SL: – Configures drive as Slave
MA: – Configures drive as Master (default mode)



Mode Select Jumpers

In most installations, jumper should remain in MA (Master) position (factory default). It is recommended that you install your CD-RW/DVD-ROM only on the secondary IDE BUS. If you are installing on primary IDE BUS, your hard drive would then be the Master, and you should set your CD-RW/DVD-ROM to the Slave position (SL).

PLACING CD-RW/DVD-ROM INSIDE YOUR COMPUTER

Now that you have set your drive's jumpers, you are ready to install your CD-RW/DVD-ROM inside your computer.

☞ **IMPORTANT: Disconnect power from your computer system before beginning installation.**

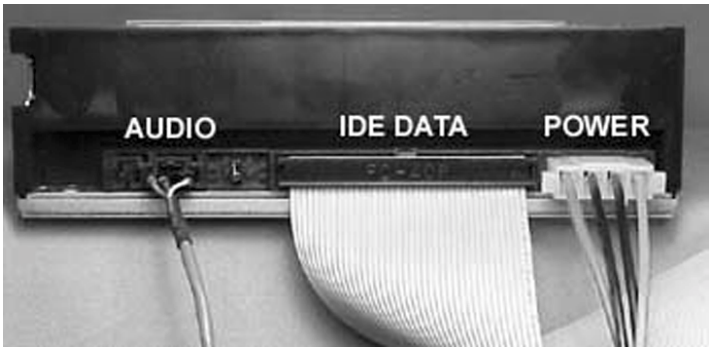
1. Remove computer cover and faceplate if required (refer to your computer system's manual for removal information).

2. If the CD-RW/DVD-ROM is replacing a CD-ROM, disconnect all connectors and remove the CD-ROM presently installed in your system.

3. Your Toshiba CD-RW/DVD-ROM can be placed in any free half-height drive slot at the front of your computer. (It can be mounted horizontally or vertically.)

4. Carefully start sliding the CD-RW/DVD-ROM into the opening with the disc tray facing the front of the computer. Before you push the drive all the way in you will need to connect the IDE BUS cable, audio cable and the power cable to the back of the drive.

CONNECTING CABLES



Cable Locations on Rear of CD-RW/DVD-ROM

IDE BUS (Data) Cable - Most computer system have a primary and secondary IDE BUS cable already installed (an IDE BUS cable is include with your kit if your system does not have a secondary IDE BUS cable).

***If you are replacing a CD-ROM*:** connect the CD-RW/DVD-ROM drive using the BUS cable that the CD-ROM was connected to. Insure that the jumper setting of the CD-RW/DVD-ROM is the same as the CD-ROM drive you are replacing.

If the CD-RW/DVD-ROM is not replacing a CD-ROM and/or is in addition to a CD-ROM: locate the secondary IDE BUS cable in your system. If your system does not have a secondary IDE BUS cable installed, you will need to install the IDE BUS cable that was included with your kit.

Installing secondary IDE BUS cable: locate the secondary IDE BUS connector on your system's motherboard (refer to your system's documentation for location). Connect one end of the IDE BUS cable to motherboard, assuring that it is keyed properly and that cable's colored edge is aligned with Pin 1.

Connect secondary IDE BUS cable to CD-RW/DVD-ROM drive, assuring that pin 1 of the cable (side with red stripe) is connected to pin 1 on the drive.

- *If the CD-RW/DVD-ROM is the only drive connected on the secondary IDE BUS cable:* connect drive to the last set of pins on IDE BUS cable.
- *If there is a device (i.e. CD-ROM) connected to the secondary IDE BUS cable:* connect CD-RW/DVD-ROM to the open middle connector . The CD-RW/DVD-ROM drive should then be jumpered to SL (slave) position.

If the CD-RW/DVD-ROM is to be the slave on the Primary BUS: connect the CD-RW/DVD-ROM to the open connector on the primary IDE BUS cable. *The CD-RW/DVD-ROM* drive should be jumpered to the SL (slave) position. *Note: the primary IDE BUS cable, in most cases, will be connected to your hard drive. The hard drive will be the Master on the primary BUS.*

Power Cable **-** Inside your computer system, locate an unused power supply cable. Connect the power cable to the power socket at the back of the CD-RW/DVD-ROM. One side of the plug has chamfered edges, so the power connector fits only one way. Push plug completely into the socket making sure the plug fits correctly.

Audio Cable **-** Connecting your CD-RW/DVD-ROM to your sound card allows you to play audio CDs on your computer (speakers or headphones are also needed).

If the CD-RW/DVD-ROM is in addition to a CD-ROM: If you choose to have both a CD-ROM and CD-RW/DVD-ROM installed in your system, in most circumstances, only one audio cable can be used (there are some sound cards that will allow you to have two audio connections). You must decide which device you would like to hear audio from and connect the audio cable from the sound card to the CD-ROM or CD-RW/DVD-ROM (DVD audio is transmitted through the data cable, not the audio cable).

If the CD-RW/DVD-ROM is to be the only CD-ROM device in your system:

- *If replacing a CD-ROM that had an audio cable connection:* connect CD-RW/DVD-ROM drive to the audio cable that the CD-ROM was connected. Cable connects to the analog audio connector at the left rear of the CD-RW/DVD-ROM (see Cable Location photo on page 3 for location).
- *If you do not have an audio cable presently in your system:* connect the CD-RW/DVD-ROM using the audio cable that was included with this kit. Connect one end to your sound card and the other end to the analog audio connector at the left rear of the CD-RW/DVD-ROM (see Cable Location photo on page 3 for location). Refer to the instructions which came with your sound card for details on any sound-driver software required.

COMPLETING INSTALLATION

After you have connected all the necessary cables, push the CD-RW/DVD-ROM completely into the computer's drive slot. Mount the drive per your computer's instructions using the screws included in your kit. If you are using other screws, assure that the screw length does not exceed 3±0.5mm (measured from outside surface of side or bottom of CD-RW/DVD-ROM to tip of screw). Replace the computer cover and all outer screws.

ATAPI CD/DVD Software Driver:

Toshiba's CD-RW/DVD-ROM drives do not require any unique device drivers for Windows '95/'98/2000/WinMe/NT. After installing your drive and re-booting, your system should recognize your drive. Win '95/'98/2000/WinMe/NT operating systems support all Toshiba ATAPI CD-RW, CD-ROM and DVD-ROM drives natively.

VOB InstantCD/DVD Software:

To install software insert the installation CD into your newly installed drive. If "*Autorun*" is enabled on your system, the Installation window will appear automatically. If it does not appear, go to Windows Start menu, select *"Run"* and type `d:\setup.exe` (substitute the appropriate letter of your new drive for `d:`). From the Installation window select *InstantCD/DVD* and follow the installation instructions that appear on your screen. For additional information on this software, please refer to the documentation found on the VOB "*InstantCD/DVD*" CD.

InstantDisc - This easy to use software enables you to create your own CDs.

InstantBackup - Easy to use backup solution with support for CD-R(W), DVD-RAM, and DVD-R(W) drives. Includes compression, encryption, spanning and scheduled backups.

InstantCopy - Professional CD Duplication program including DAO-RAW support, easy to use profiles and On-the-Fly Data Processing.

InstantWrite - The only complete UDF packet writing software. Supports CD-R(W), DVD-RAM and DVD-R and all UDF levels up to 2.01. With easy to use format wizard and Defragmentation utility.

InstantMusic - Easy to use 16 track harddisc recording studio. Song composing made easy. Includes real-time mixer, about 1000 high quality samples and various effect filters.

InstantVideo - Creates VideoCDs- and SuperVideoCDs that can be played back in almost any DVD-Player. AVIs are automatically encoded to the correct MPEG-1 format.

CyberLink PowerDVD™:

CyberLink PowerDVD™ is a high-quality, pure-software DVD player that brings high-quality movies and karaoke into your multimedia PC. You can playback high resolution DVD titles or MPEG-2 files with superb MPEG-2 video and Dolby AC-3 audio quality.

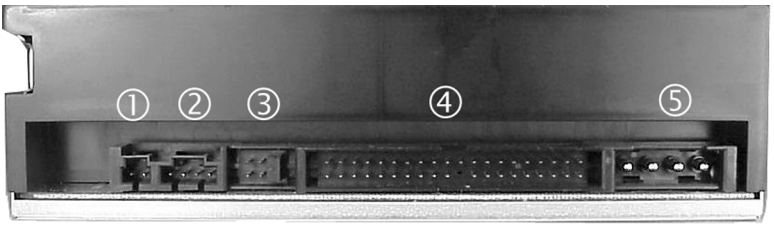
To install, insert CyberLink PowerDVD™ into your newly installed CD-RW/DVD-ROM. Go to Windows Start menu, select *"Run"* and type `d:\setup.exe` (substitute the appropriate letter of your CD-RW/DVD-ROM drive for `d:`). Follow the installation instructions on screen. For additional information on using this software, please refer to the PowerDVD™ Help file (if you have opened PowerDVD™ software, click "?").

CD-RW/DVD-ROM FRONT PANEL

The photo illustrates the following features of the SD-R1102 CD-RW/ DVD-ROM front panel:

① Headphone Jack
② Volume Control
③ Loading Tray
④ Busy Light
⑤ Eject Button
⑥ Emergency Eject Hole

CD-RW/DVD-ROM BACK PANEL



The photo below illustrates the following features of the SD-R1102 CD-RW/DVD-ROMs back panel:

① Digital Audio Out Connector
② Analog Audio Out Connector
③ Mode Select Jumper
④ ATAPI Connector
⑤ Power Connector

SPECIFICATIONS	SD-R1102
DATA CAPACITY (bytes/block)	DVD: 2,048 CD: 2,048 (mode 1) 2,336 (mode 2)
ROTATIONAL SPEED	DVD: 5,053rpm (3.3-8X) DVD-R: 1,100-2,800rpm (2X) CD: 6,849rpm (13.8-32X) CD-RW: 4,281rpm (8.6-20X) CD-R,CD-RW: 1,700- 3,960rpm (8X)
SUSTAINED DATA TRANSFER RATE	DVD: 4,476 - 10,816KB/sec CD: 2,070 - 4,800KB/sec (mode 1) 2,359 - 5,472KB/sec (mode 2)
ACCESS TIME (Typ.) Avg. Random Access Avg Random Seek Avg. Full Stroke	DVD / CD 130ms / 100ms 120ms / 95ms 200ms / 160ms
DATA BUFFER	2Mbytes
POWER SUPPLY	+5v, +12v
MTBF	100,000 hours
DIMENSIONS (Wx H x D)	5.7” x 1.6” x 7.6” (146mm x 41.5mm x 193mm)
WEIGHT	0.58lbs (0.98kg)
MOUNTING ORIENTATION	±10° vertical / ±20° horizontal

TECHNICAL SUPPORT

Technical support can be obtained by calling 949/455-0407 or by sending an email to: toshibadpd@teleplan-ventura.com or visiting our website at: http://www.sdd.toshiba.com

FCC DECLARATION OF CONFORMITY

This equipment has been tested and found to comply with the limits for a class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy, and if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Re-orient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

This equipment has been certified to comply with the limits for a class B computing device, pursuant to FCC Rules. In order to maintain compliance with FCC regulations, shielded cables must be used with this equipment. Operation with non-approved equipment or unshielded cables is likely to result in interference to radio and TV reception. The user is cautioned that changes and modifications made to the equipment without the approval of the manufacturer could void the user's authority to operate this equipment.

LASER CAUTION

This appliance contains a laser system and is classified as a "CLASS 1 LASER PRODUCT". To use this model properly, read this Owner's Manual carefully and keep this manual for future reference. In case of any trouble with this model, please contact your nearest "Authorized Repair Center". *To prevent direct exposure to the laser beam, do not try to open the enclosure*

WARRANTY INFORMATION

Toshiba America Electronic Components, Inc. (“TAEC”) warrants that all products will, upon delivery by TAEC to the customer in new condition, be free from defects in material and workmanship for a period of twelve (12) months after delivery. TAEC warrants that spare Parts and Accessories will be free from defects in material and workmanship for a period of ninety (90) days. These warranties are effective from the date of shipment by TAEC to the original purchaser and will be extended only to that original purchaser. TAEC will, at its option, repair or replace the defective item under warranty in accordance with TAEC’s published Repair Policy and Procedure.

This warranty is void: (a) if the Products are used under other than normal use and maintenance conditions, (b) if the Products are modified or altered, unless the modification or alteration is expressly authorized by TAEC, (c) if the equipment is subject to abuse, neglect, lightning, electrical fault, or accident, (d) if the Products are repaired by someone other than TAEC, (e) if the serial numbers of the Products are defaced or missing, or (f) if the Products are installed or used in combination or in assembly with products not supplied by and which are not compatible or of inferior quality, design or performance.

This Warranty shall constitute the sole and exclusive liability of the TAEC, it's successors or assigns, in connection with the goods purchased and is in lieu of all other Warranties, expressed or implied, including but not limited to any implied warranty of merchantability, fitness for a particular purpose or fitness for use, and all other obligations or liabilities of TAEC, it's successors or assigns.

Under no circumstances will the customer or any user or other person be entitled to any direct, indirect, special, consequential, or exemplary damages, for Breach of Contract, Tort, or otherwise. Under no circumstances will any such person be entitled to any sum greater than the purchase price paid for the product that is malfunctioning.

This warranty does not apply to expendable parts such as fuses, filters, removable media, and other such parts classified by Seller as expendable.

- All repairs will be performed at TAEC’s Repair facility, except for repairs made at the Purchaser’s site, as specifically agreed by TAEC in writing.
- Purchaser shall bear the cost of shipping to TAEC’s facility those items that fail while under warranty. TAEC shall bear the cost of return shipment to Purchaser’s facility.
- Repairs on products that fail during the new product warranty period are warranted for the remainder of the new product warranty period or 90 days, whichever is the greatest.
- The repair of product that failed after the expiration of the original warranty period is warranted for ninety days from the date the repaired item is shipped back to the customer.
- To obtain service under this warranty, the Purchaser must bring the malfunction of the Product to the attention of TAEC within the twelve (12) month period and no later than thirty (30) days after such malfunction, whichever occurs first. Failure to bring the malfunction to the attention of TAEC, within the prescribed time, will result in the Purchaser being not entitled to warranty service.

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